

Method and system for network management with
backup management with backup status gathering

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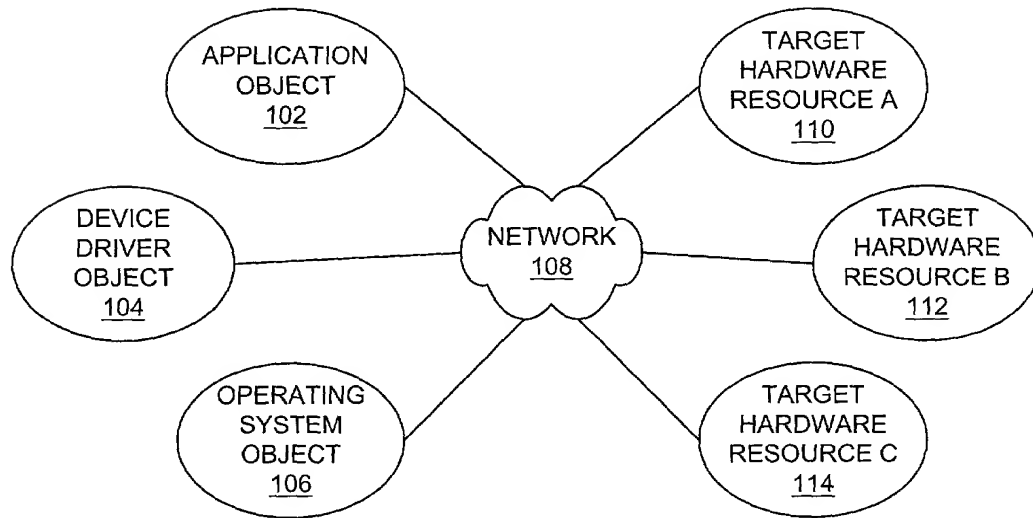


FIG. 1
(PRIOR ART)

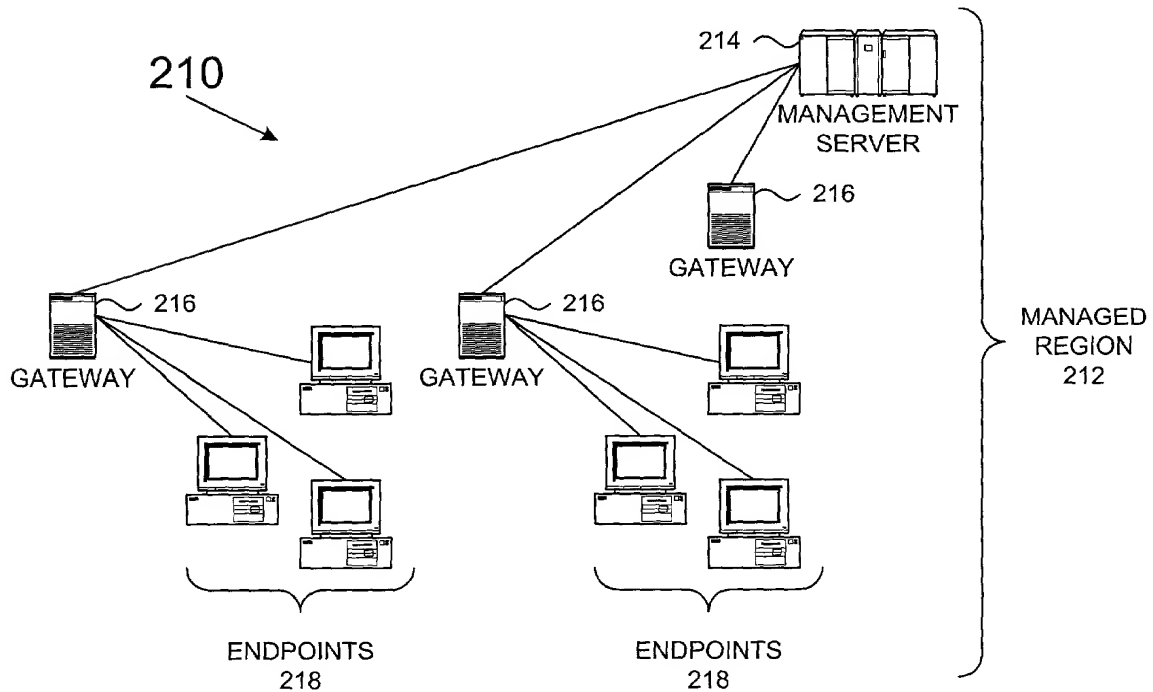


FIG. 2A

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backup management with backup status gathering

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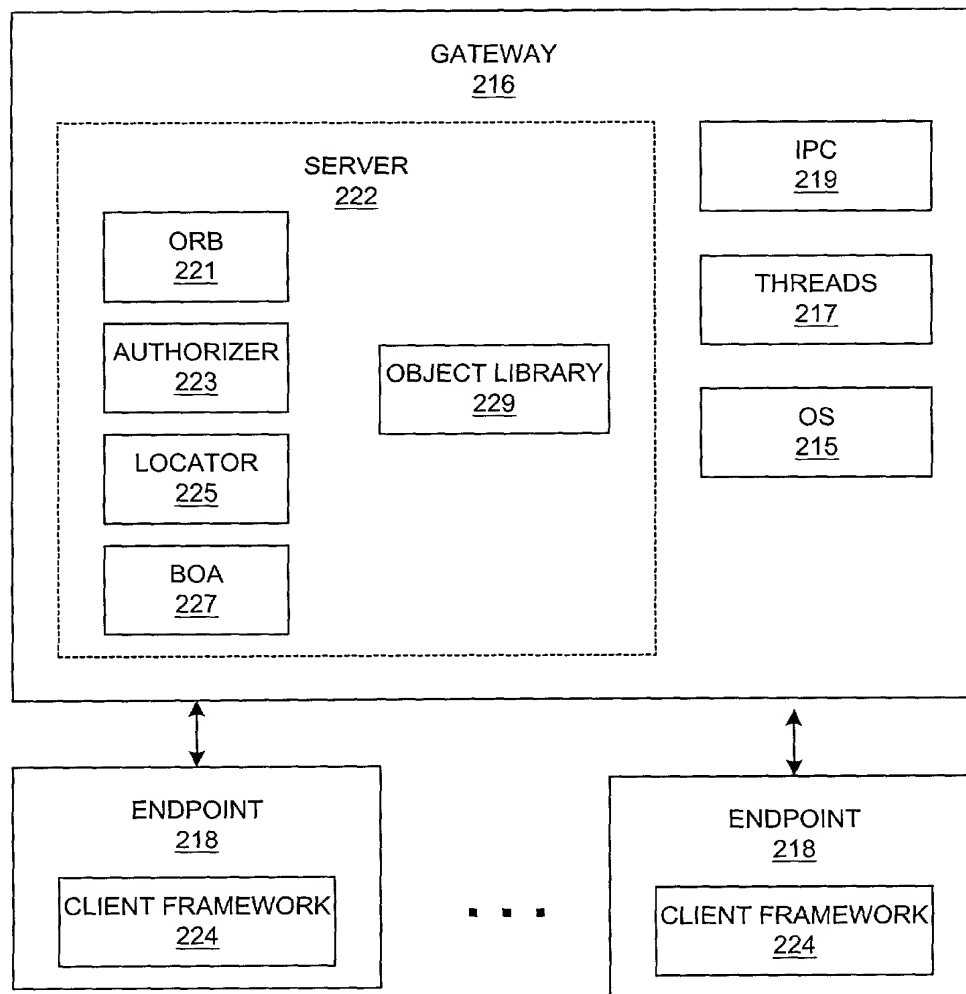


FIG. 2B

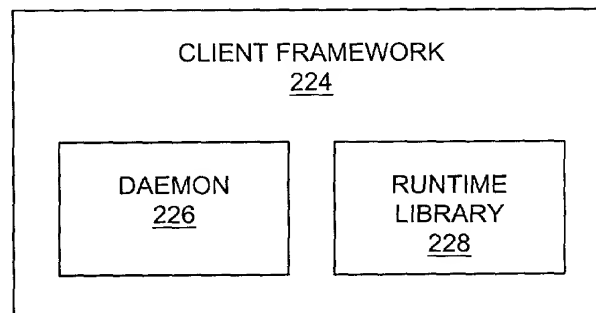


FIG. 2C

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backup management with backup status gathering

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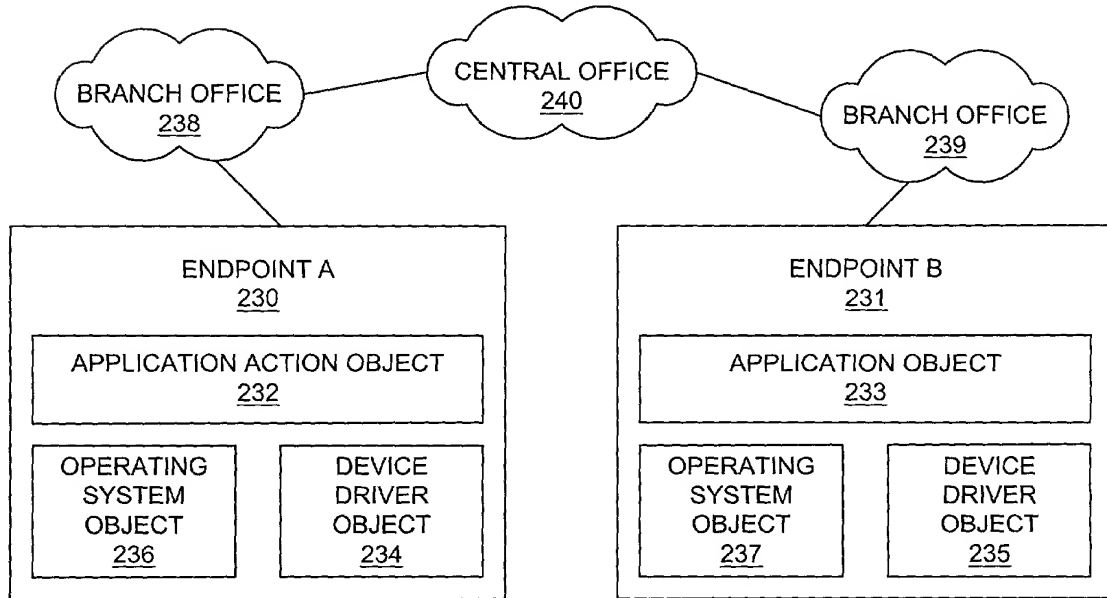


FIG. 2D

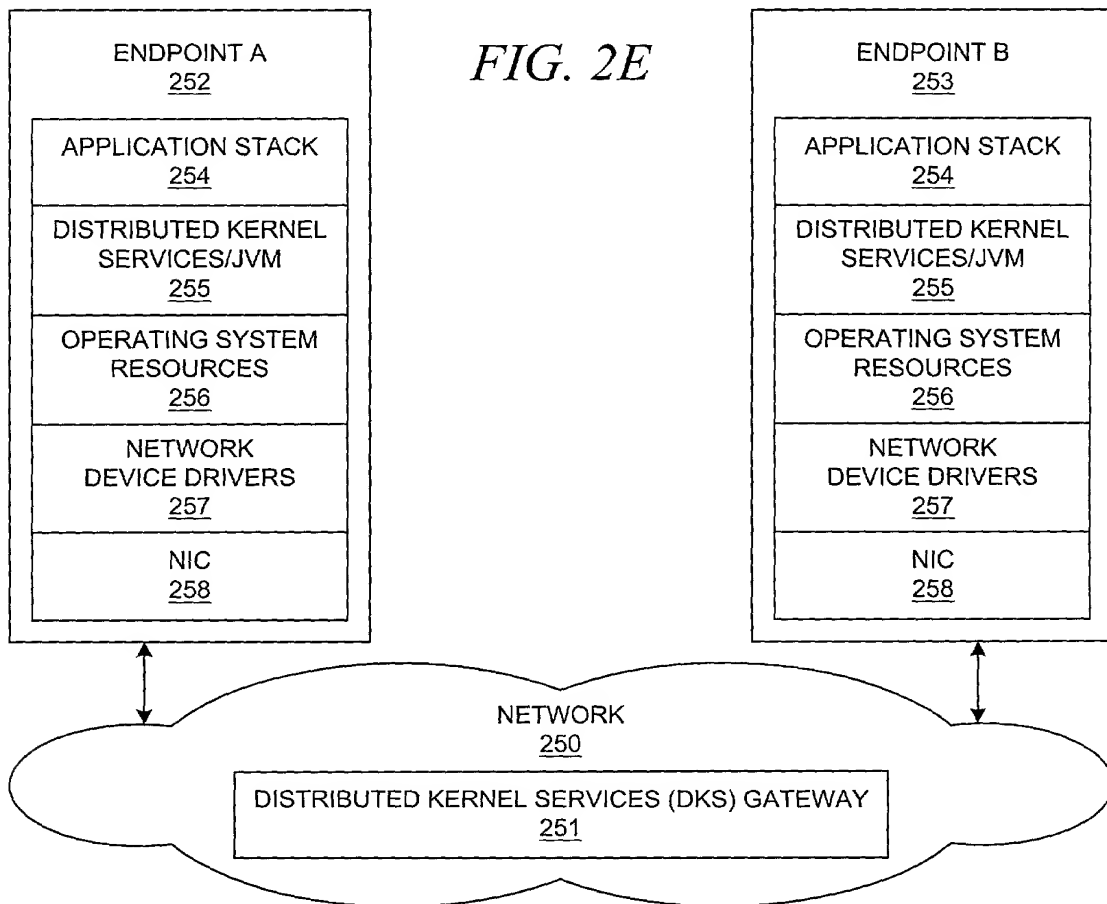


FIG. 2E

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backup management with backup status gathering

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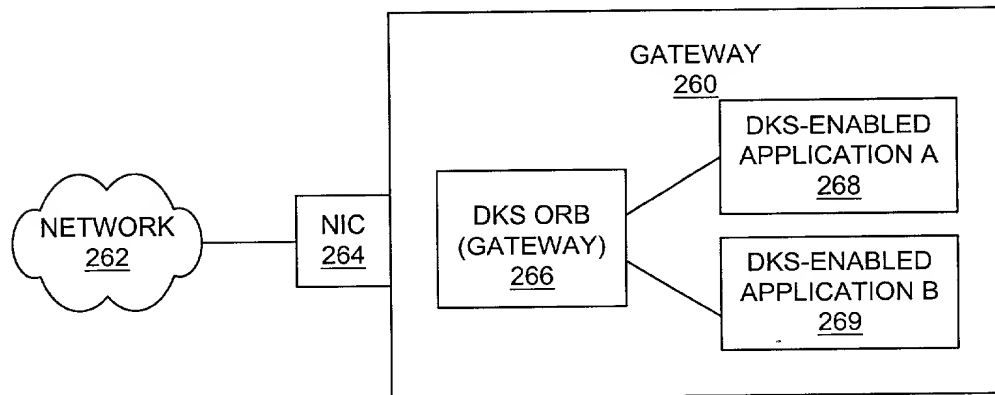


FIG. 2F

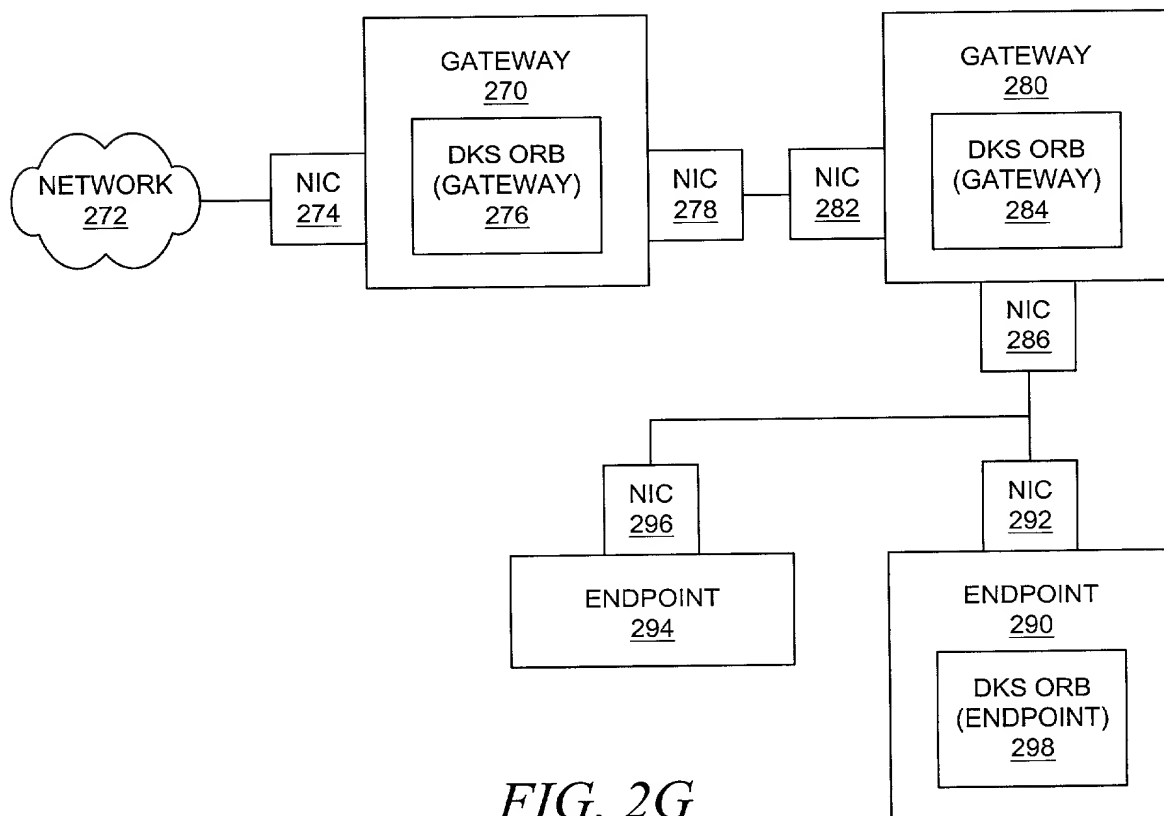


FIG. 2G

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backup management with backup status gathering

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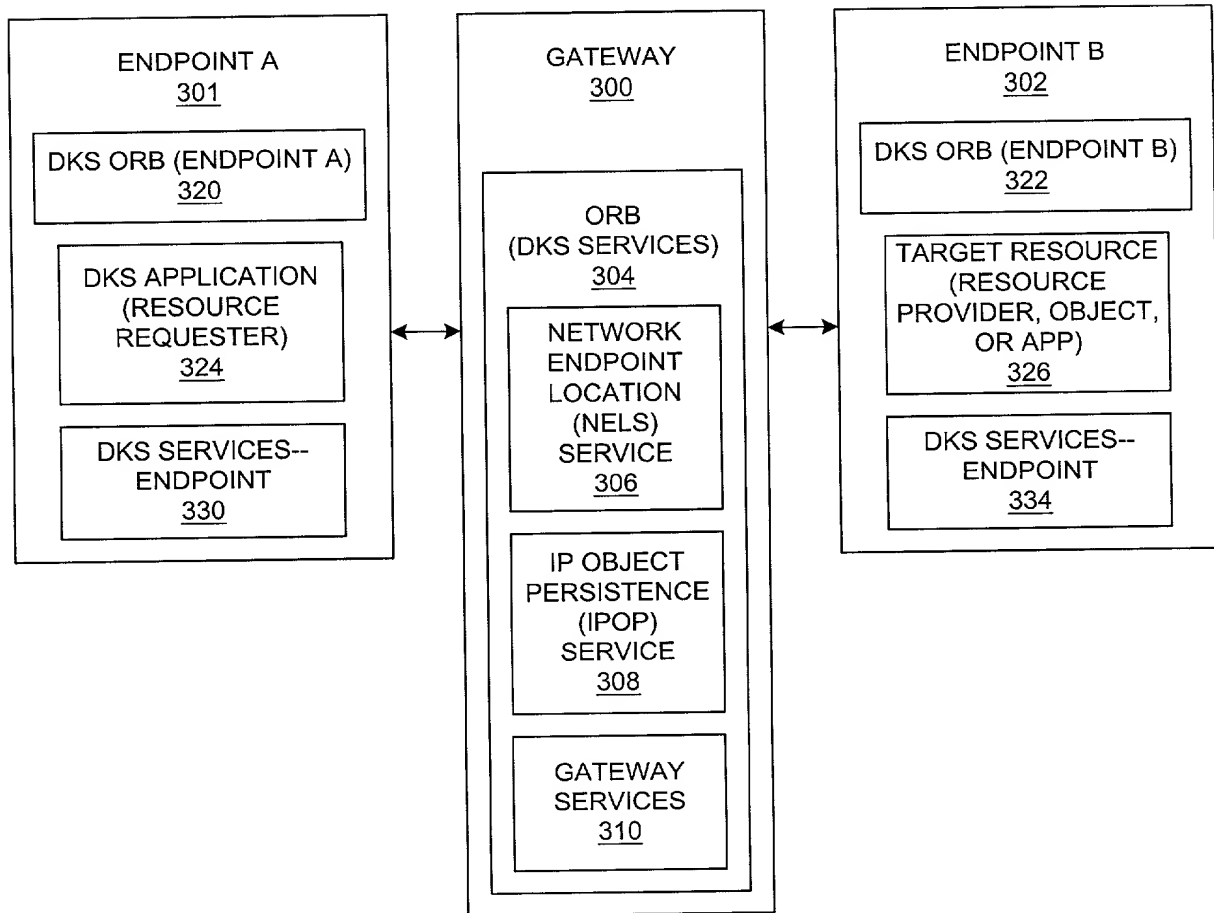


FIG. 3

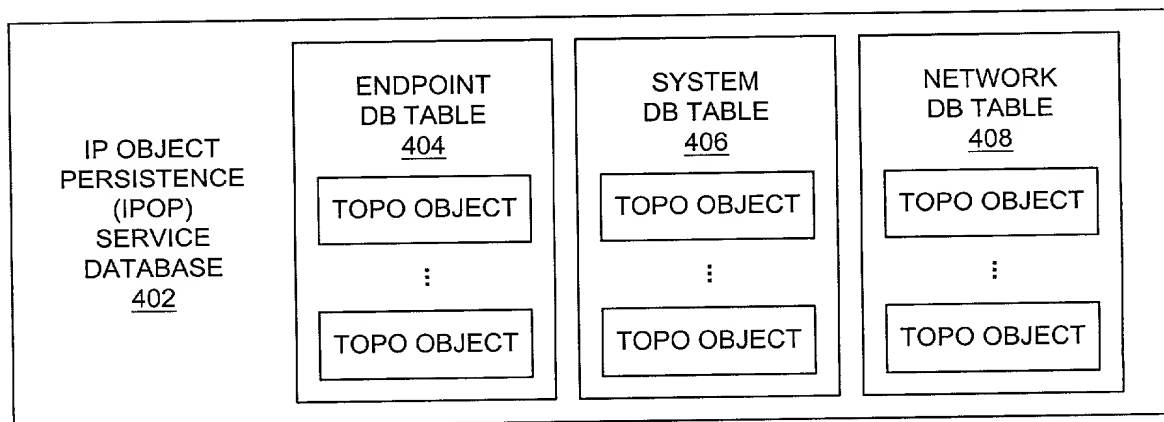


FIG. 4

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backup management with backup status gathering

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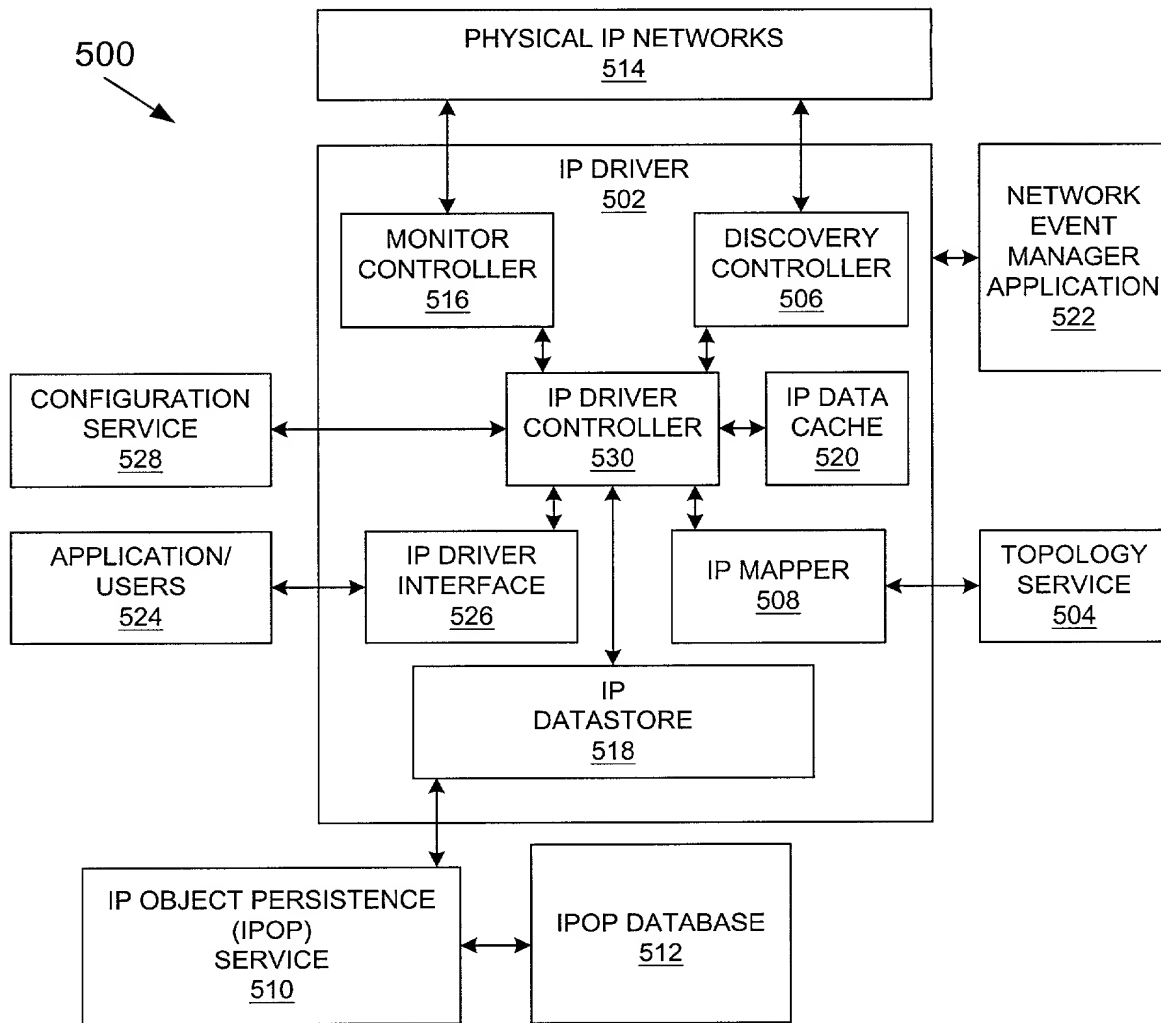


FIG. 5A

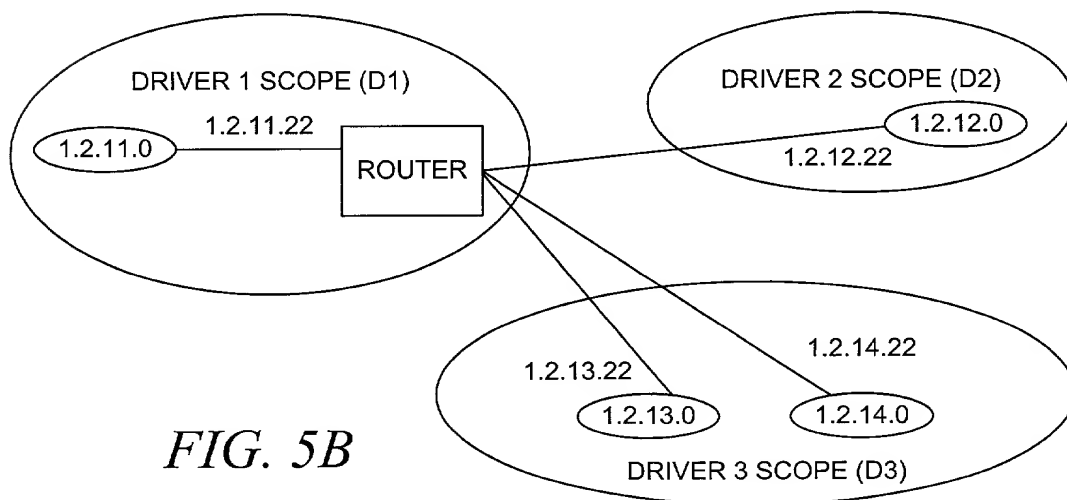


FIG. 5B

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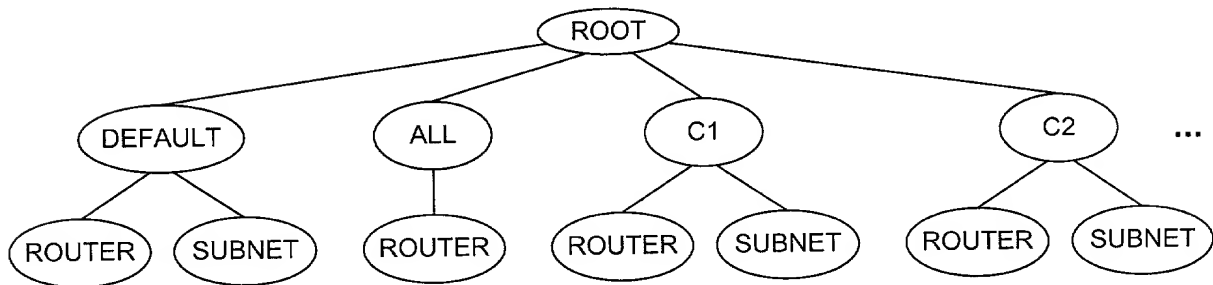


FIG. 5C

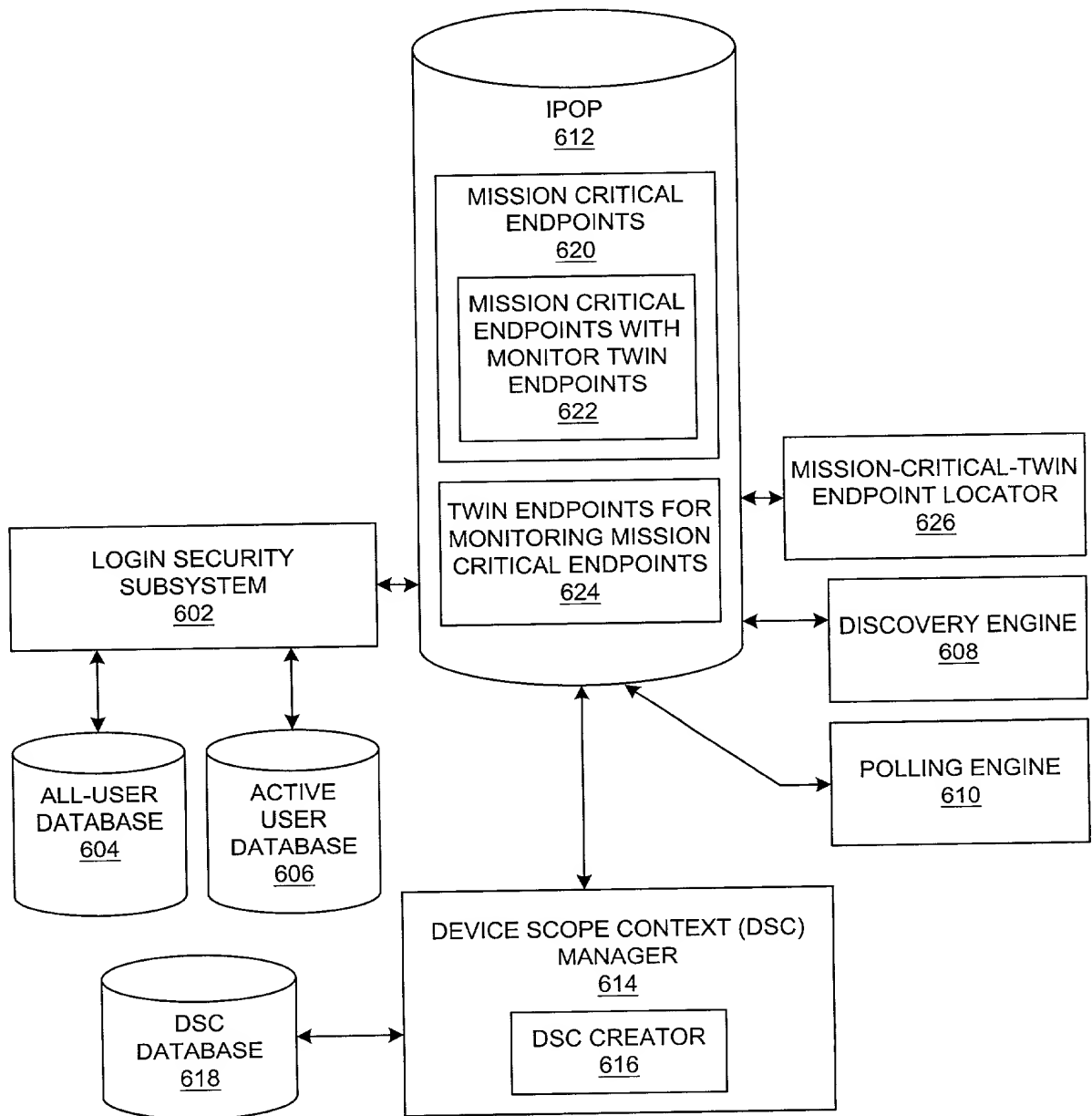


FIG. 6

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backup management with backup status gathering

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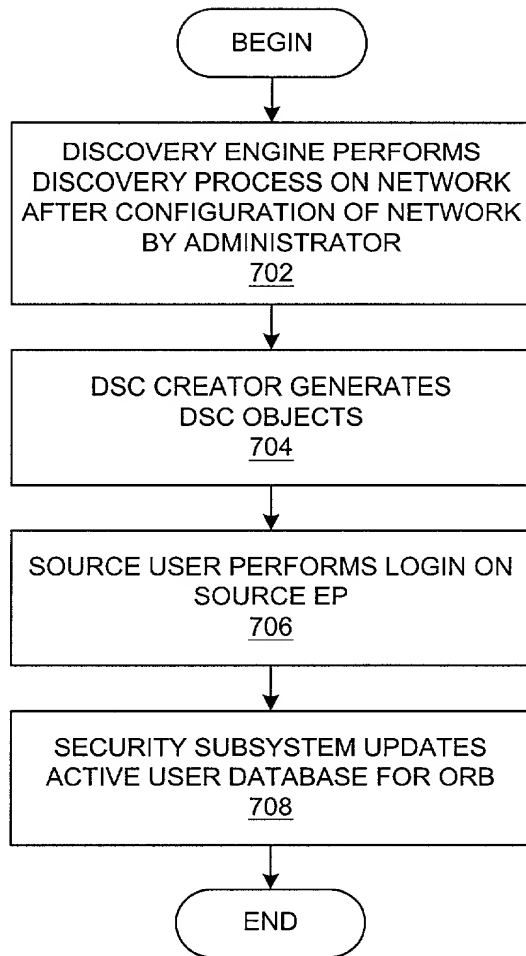


FIG. 7A

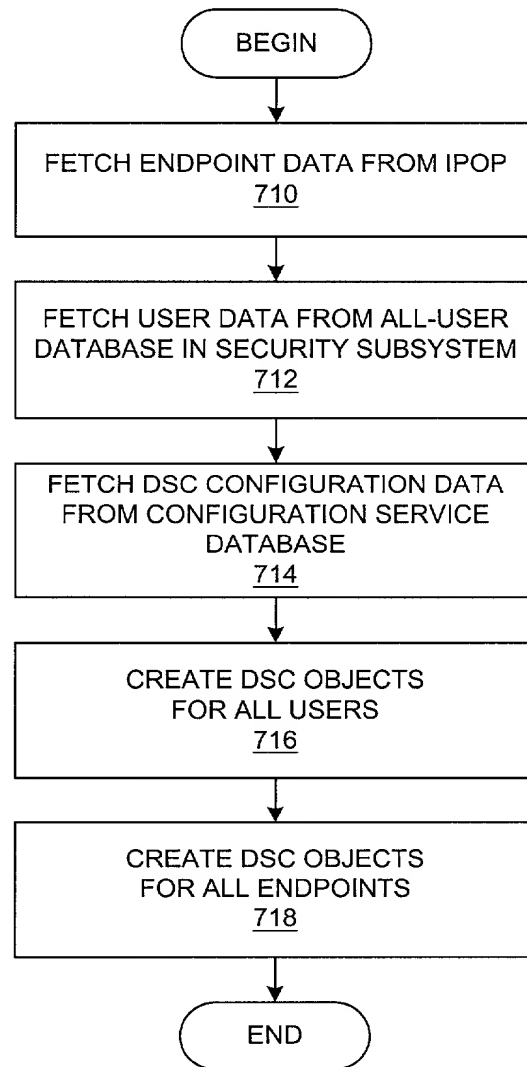


FIG. 7B

Method and system for network management with
backup management with backup status gathering

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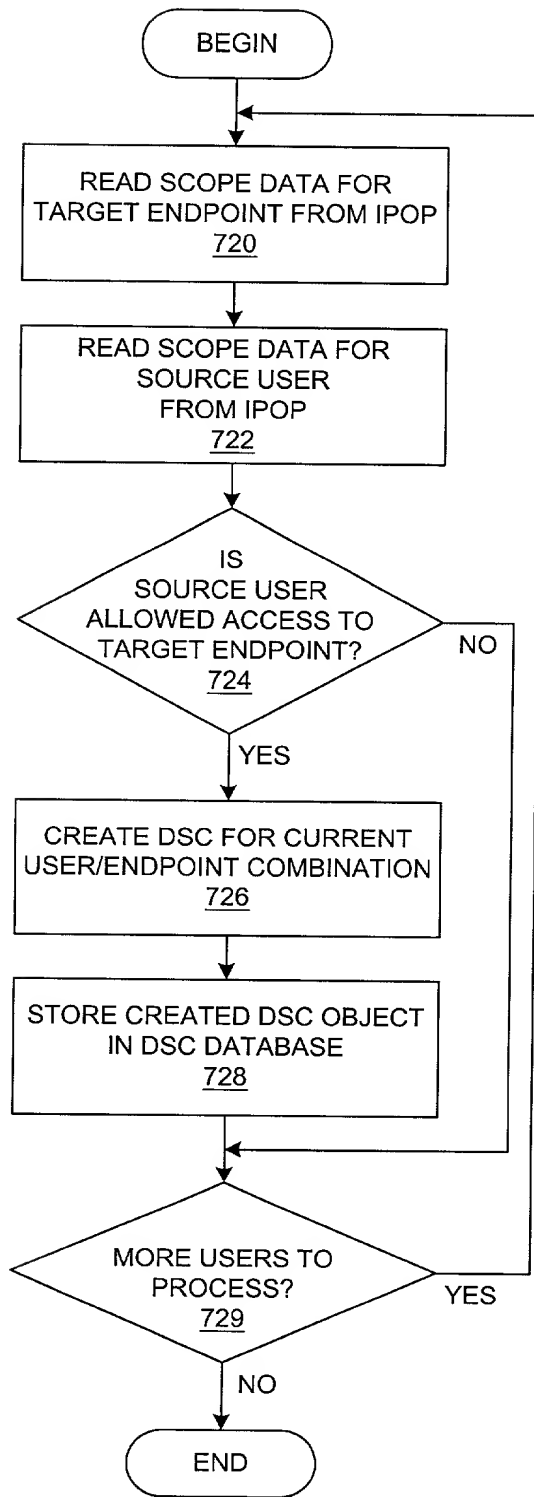


FIG. 7C

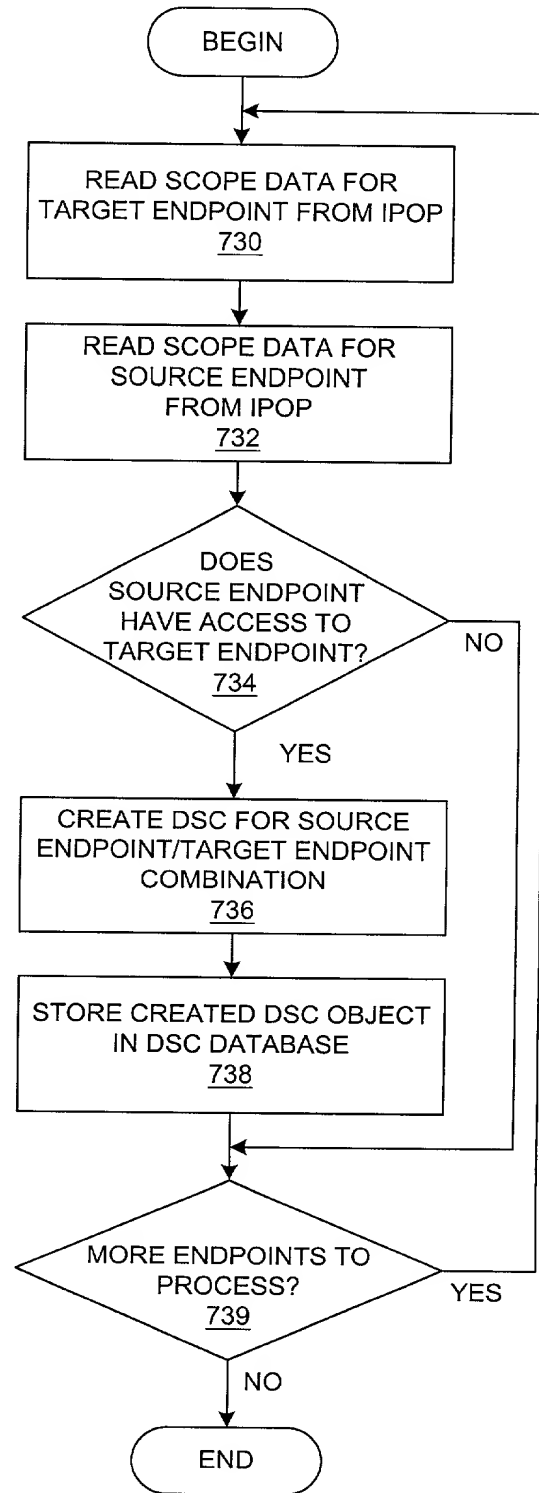


FIG. 7D

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Network Management Application

ADAPTIVE MONITORING SETTINGS

POLLING INTERVAL MINUTES ~ 804

☒ SOURCE USER ~ 805 ~ 806

☐ SOURCE ENDPOINT ~ 807 ~ 808

PRIMARY DSC

☒ BY USER ~ 812

☐ BY ENDPOINT ~ 814

802

810

SET ~ 816

CLEAR ~ 818

FIG. 8A

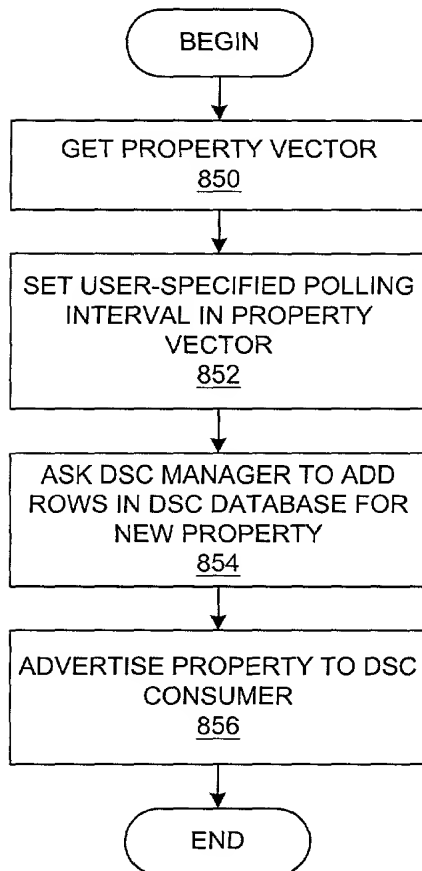


FIG. 8C

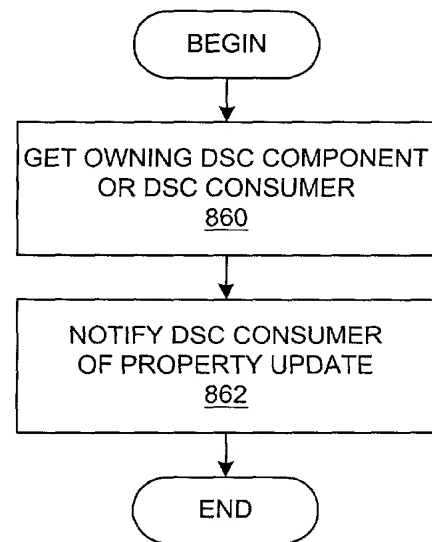


FIG. 8D

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backup management with backup status gathering

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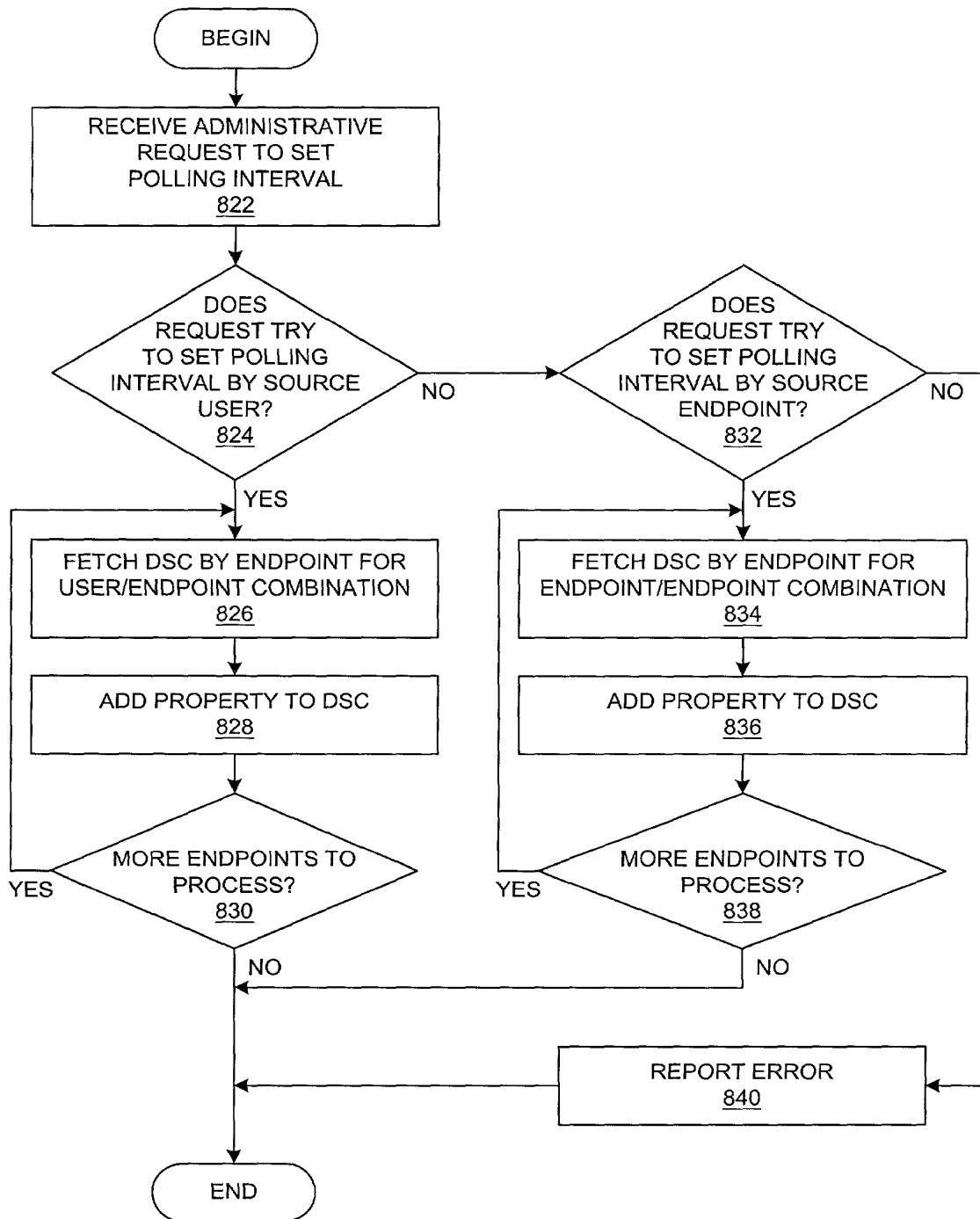


FIG. 8B

Method and system for network management with
backup management with backup status gathering

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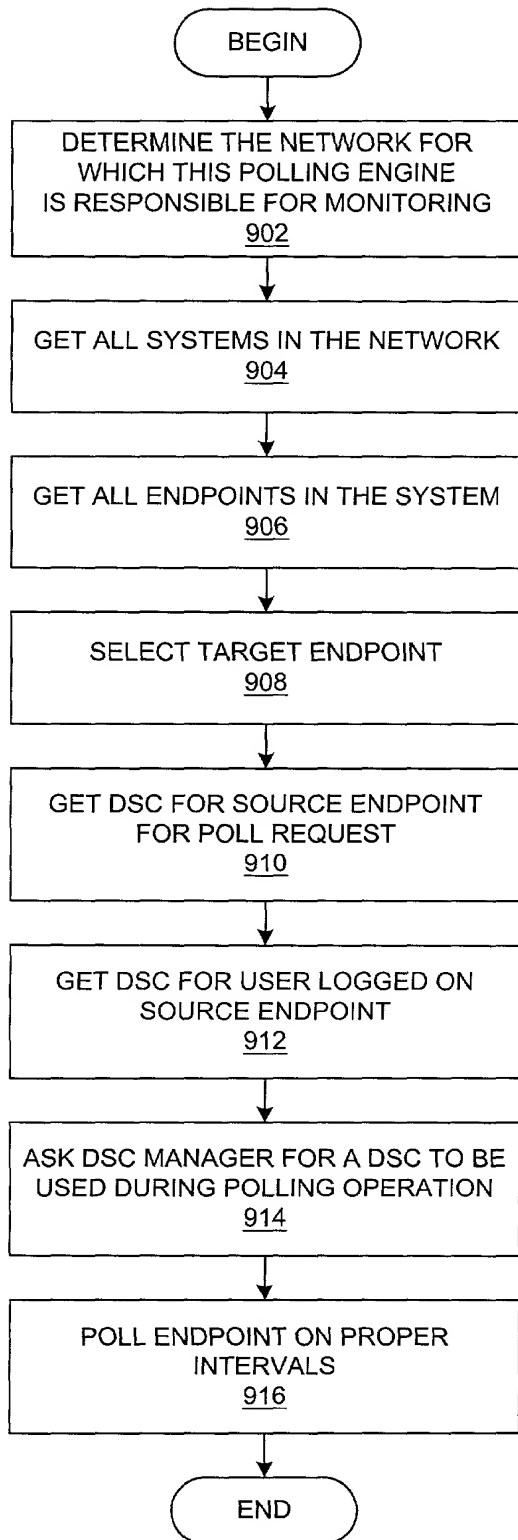


FIG. 9A

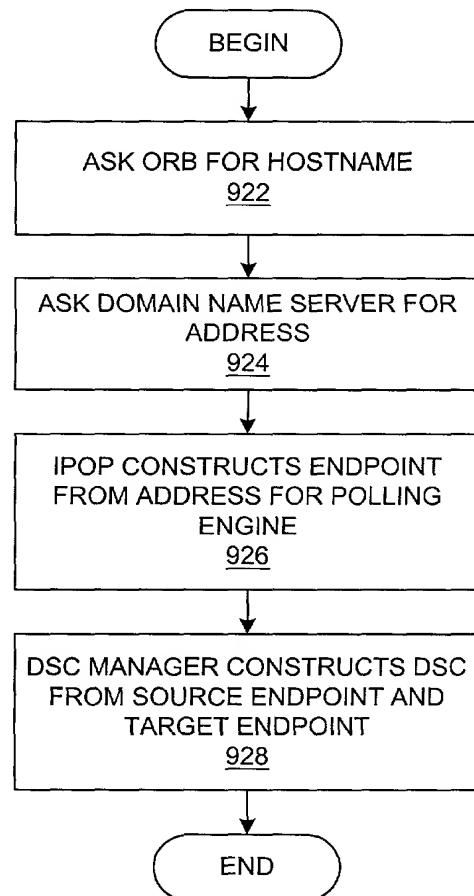


FIG. 9B

Method and system for network management with
backup management with backup status gathering

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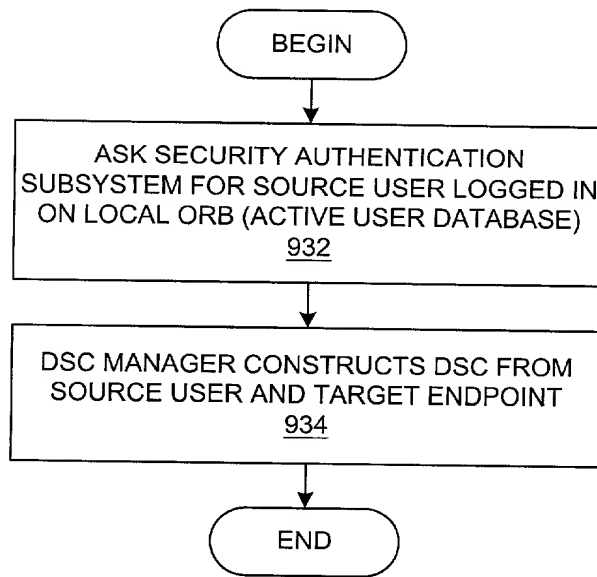


FIG. 9C

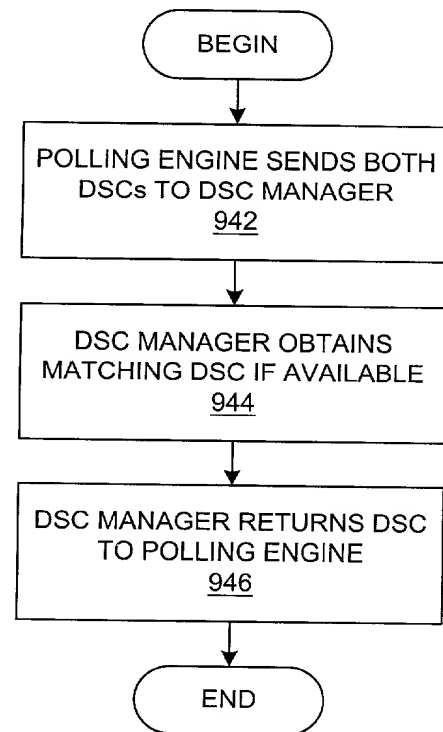


FIG. 9D

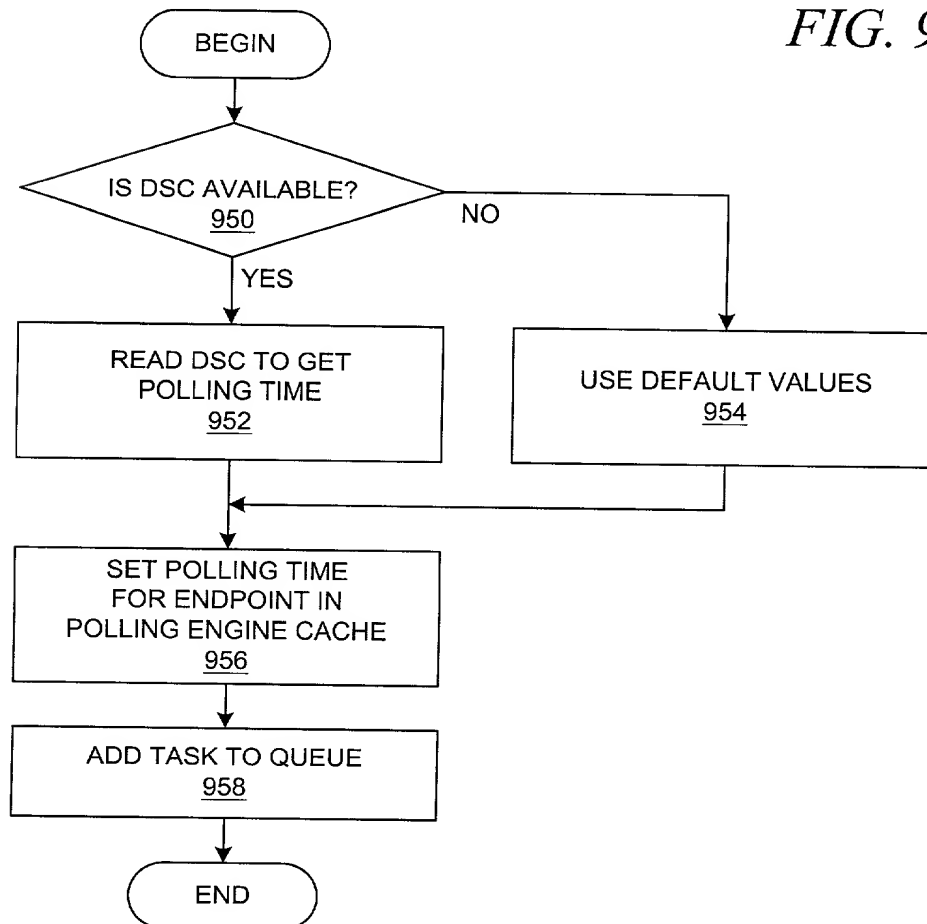


FIG. 9E

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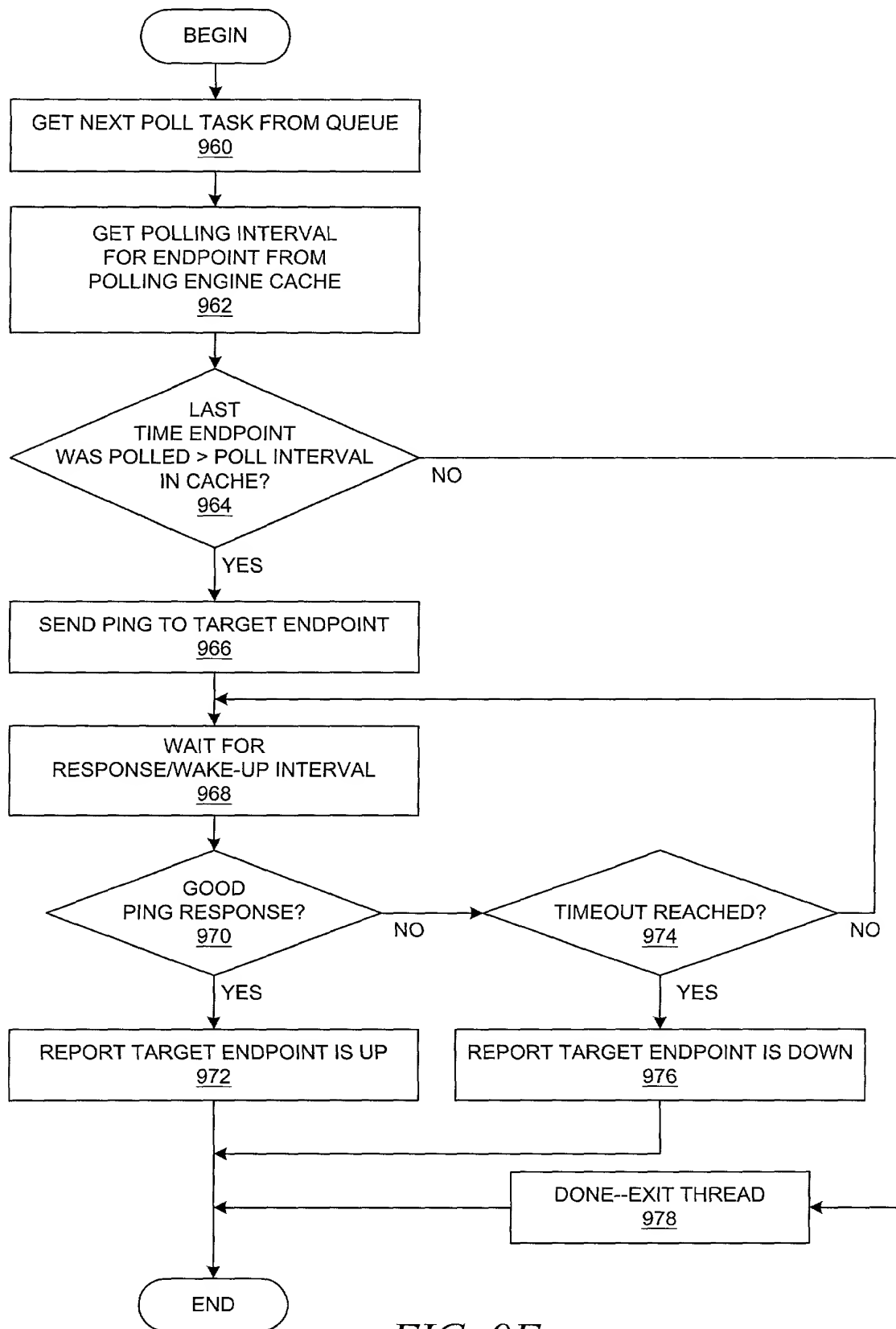


FIG. 9F

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backup management with backup status gathering

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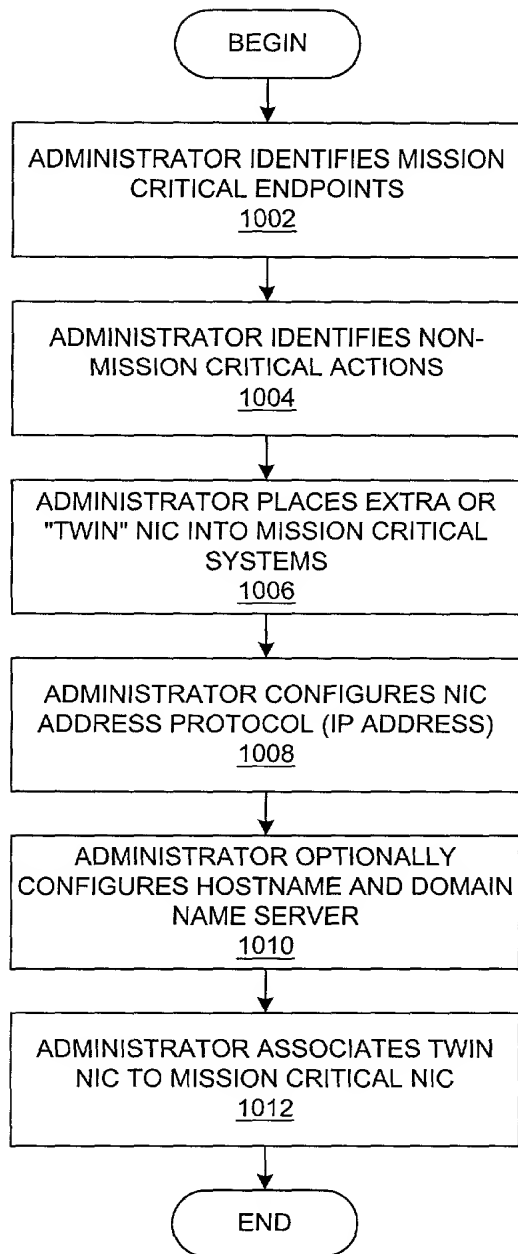


FIG. 10A

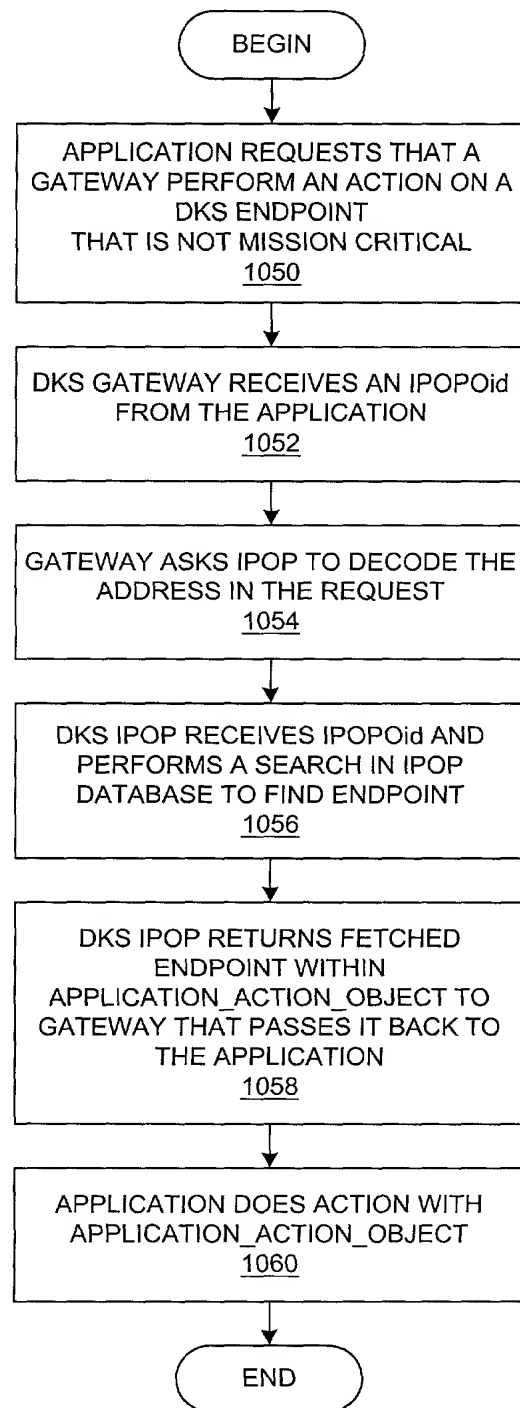


FIG. 10D

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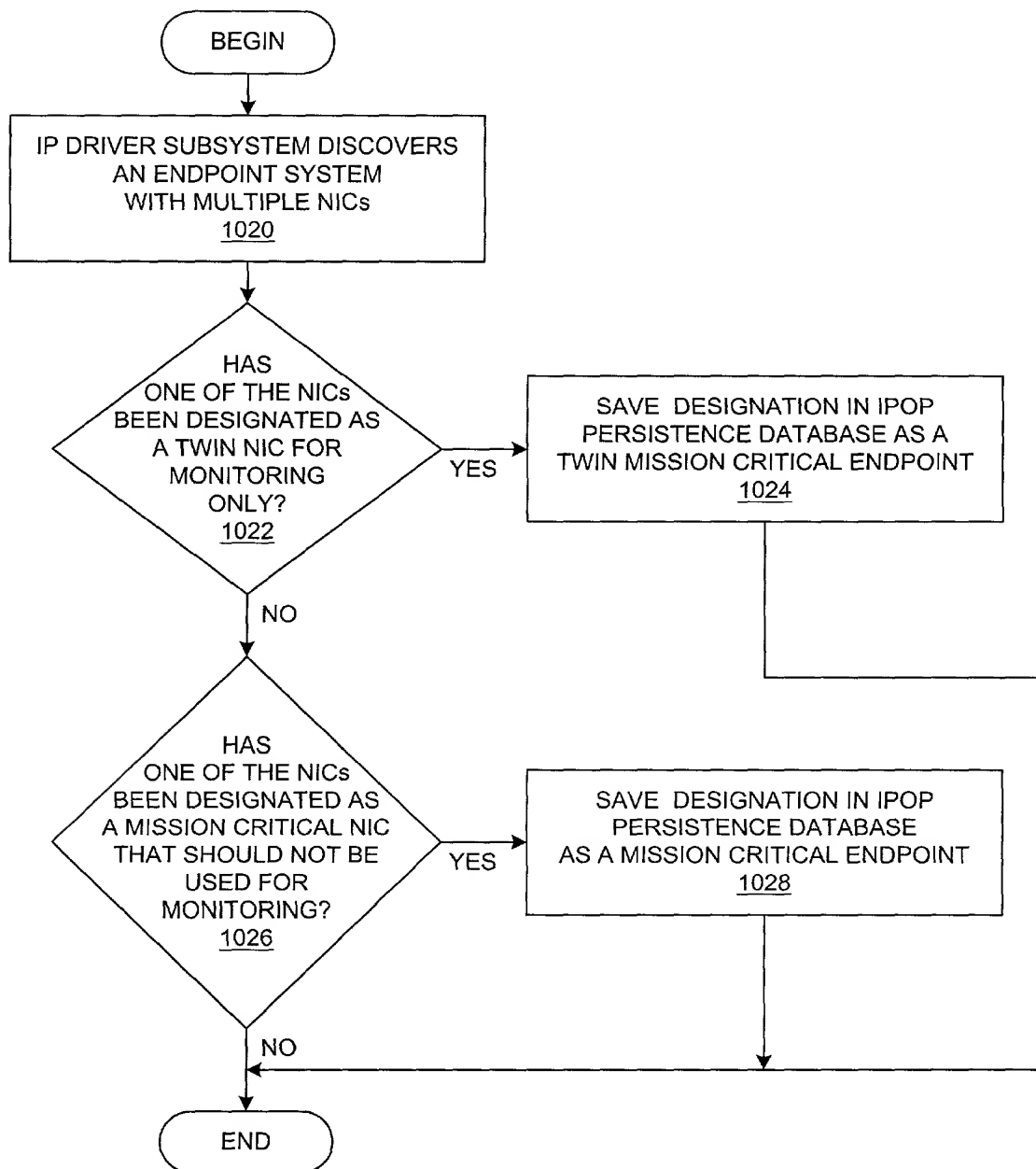


FIG. 10B

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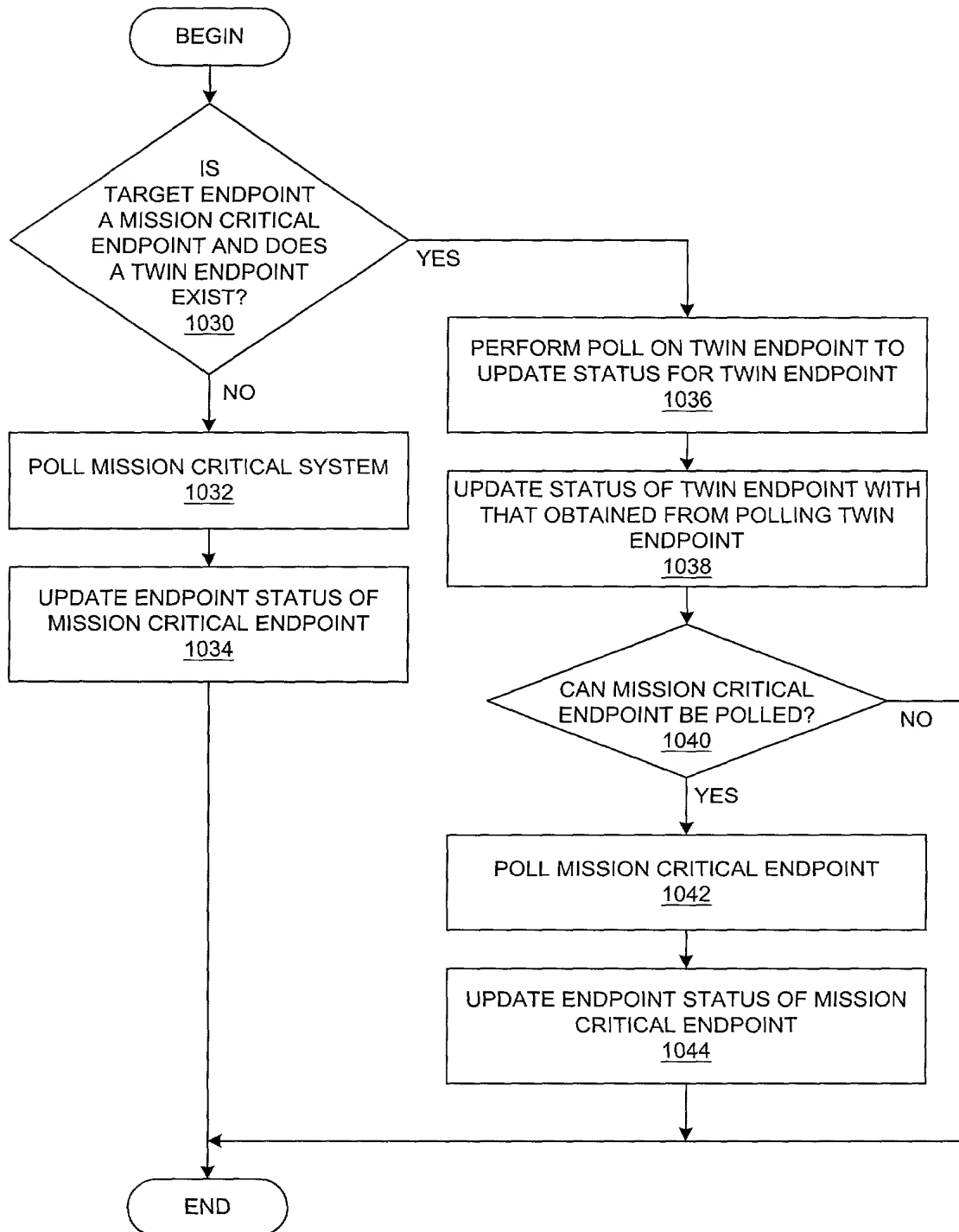


FIG. 10C

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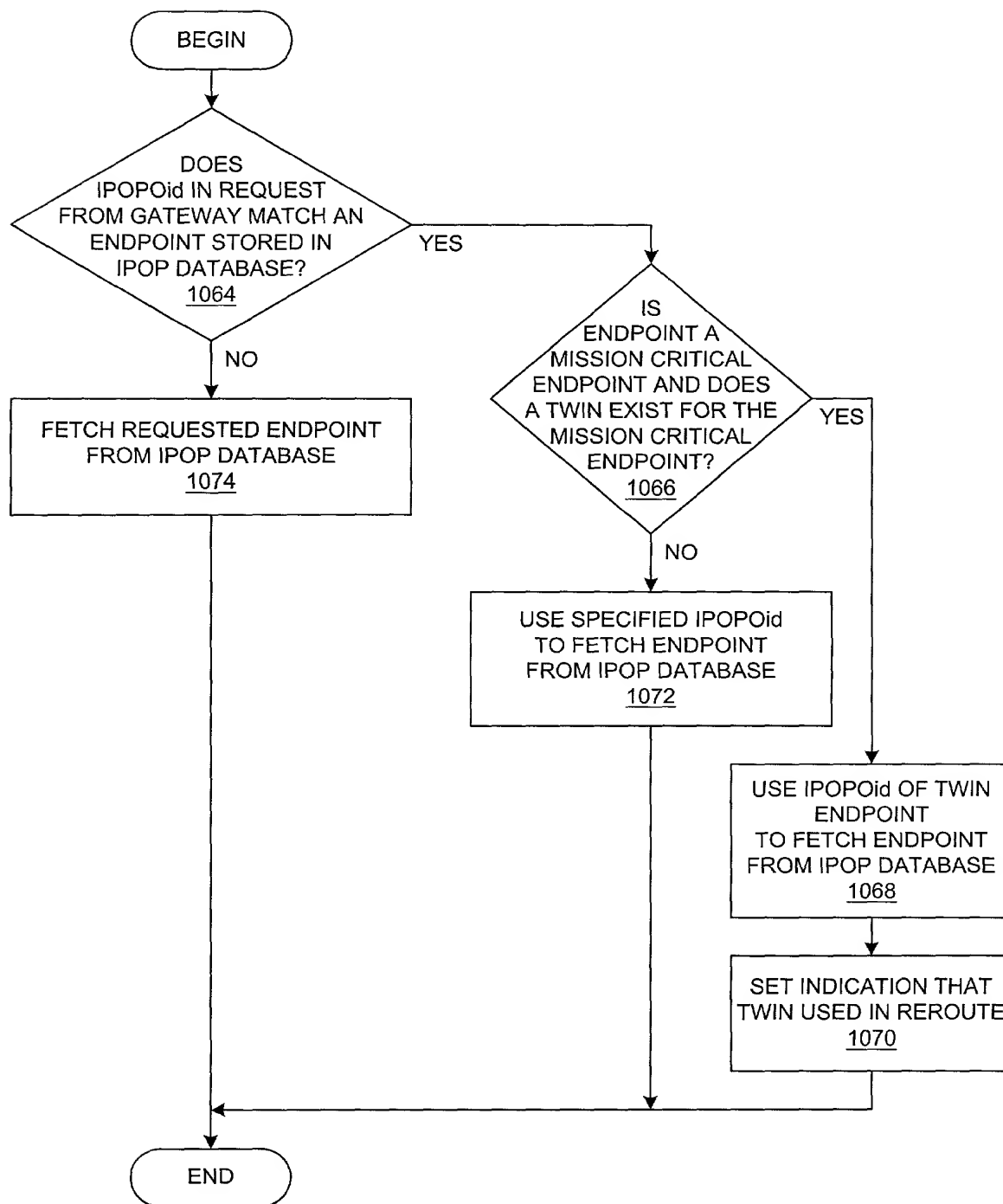


FIG. 10E

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Network Management Application

MISSION CRITICAL TWIN ASSIGNMENT--MISSION CRITICAL ENDPOINT: 7.17.13.11 1091

ENDPOINT TO USE AS TWIN:

☐ MAC ADDRESS: 1093

☒ VPN NUMBER: 1094 IP ADDRESS: 1095

1092

SET 1096 CLEAR 1097

FIG. 10F

```

CLASS ACTION_OBJECT {
    // CONSTRUCTOR
    ACTION_OBJECT( LONG IPADDRESS, SHORT VIRTUALPRIVATENETWORKADDRESS )
        THROWS BADADDRESS ...
    .
    .
    .
    VOID PERFORMACTION( ) // EXECUTES ACTION METHOD
    .
    .
    .
}

```

FIG. 11A

```

CLASS APPLICATION_ACTION_OBJECT EXTENDS ACTION_OBJECT {
    boolean IsMissionCriticalAction;
        // TRUE = USED TO PERFORM ENTERPRISE-RELATED WORK
        // FALSE = USED TO PERFORM MONITORING OPERATIONS
        // OR OTHER NON-REVENUE PRODUCING ACTION

    boolean TwinUsedinReroute;
        // TRUE = IPOP HAS REPLACED REQUESTED ADDRESS WITH AN ADDRESS
        // THAT CAN BE USED FOR NON-MISSION CRITICAL ACTION
    .
    .
    .
}

```

FIG. 11B

Method and system for network management with
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Public Class Endpoint {

//public variables

long EObjectID; // ID to object (both private and public network addresses)

InetAddress EIPAddress; // physical network address (private or public)

long EPVPN; // virtual private network ID

// get/set of variables

public long getObjectID() { ... }

public InetAddress getAddress() { ... }

public long getVPN() { ... }

}

FIG. 11C

Class TwinMissionCriticalEndpoint extends Endpoint {

.

.

.

IPOPOid missionCriticalEndpoint;

// Mission critical endpoint that is used to gather status

IPOPOid missionCriticalSystem;

// Mission critical system

long endpointStatus;

long twinEndpointStatus;

.

.

.

}

FIG. 11D

Class MissionCriticalEndpoint extends Endpoint {

.

.

.

boolean useForMonitoring; // TRUE = endpoint can be used for monitoring,
// polling, and other system-management-type
// resources

.

.

.

}

FIG. 11E

Method and system for network management with
backup management with backup status gathering

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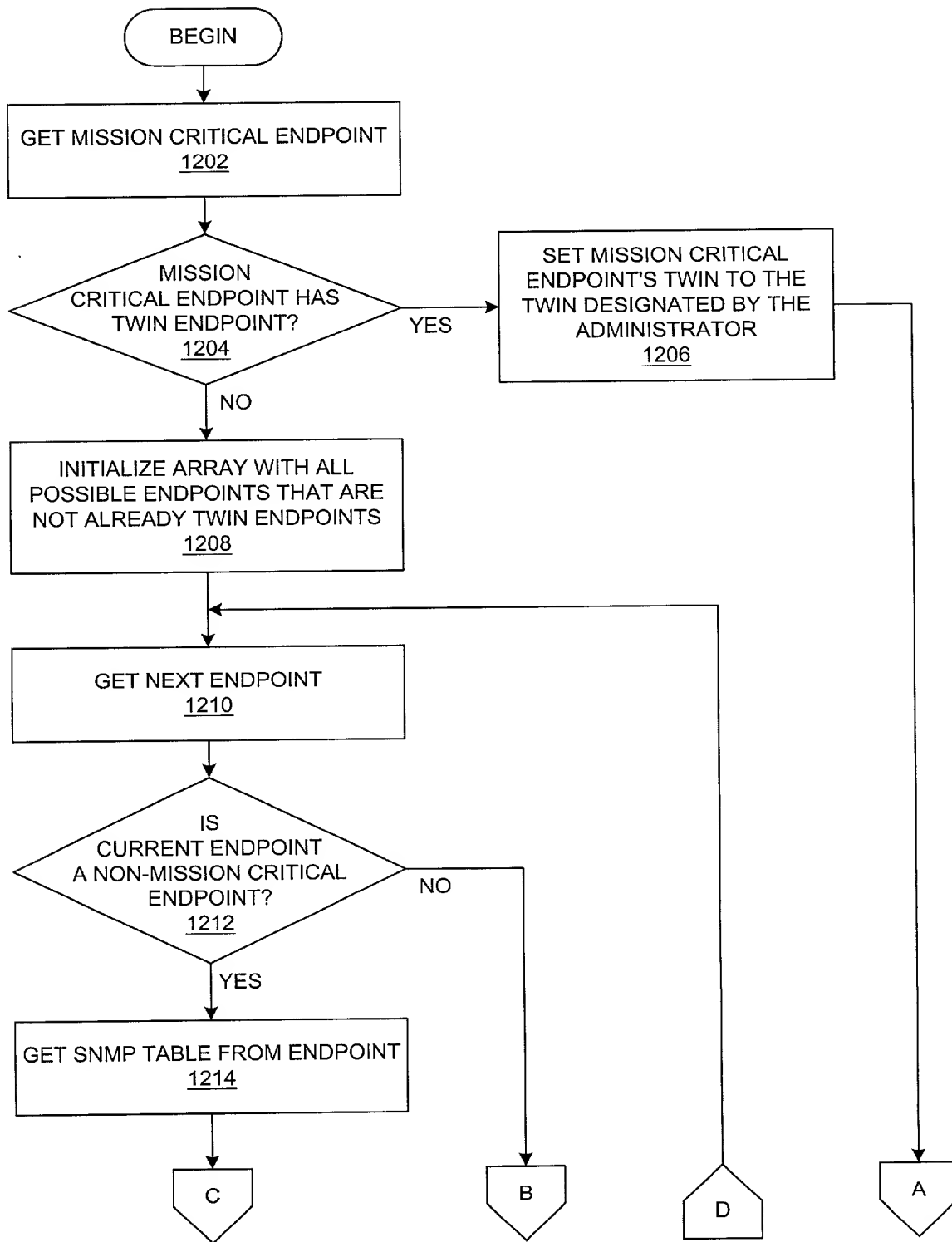


FIG. 12A

Method and system for network management with
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